

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-22. (Cancelled).

23. (Currently Amended) A thermal spray coating method, comprising the steps:

recording of images of real powder particles of at least one of a plasma jet and a particle jet for thermal spray coating;

assigning the images of said real powder particles of at least one of the plasma jet and the particle jet from at least one region of equal intensity or at least one region within a particular intensity level to one or more symmetric geometrical surface regions by computer processing or encoding to provide monitoring of quality of a thermal spray process.

24. (Previously Presented) The method according to claim 23, wherein said one or more symmetric geometrical surface regions of the image are recorded as data records based on typical characteristics for the respective geometrical shape and at least one of recording, controlling and monitoring at least one of the characteristics of thermal spray coating method effecting the quality of the coating layer as a function of said data record.

25. (Previously Presented) The method of claim 23, wherein the symmetric geometrical surface region is selected from one or more of circles, squares, rectangles, parallelograms and ellipses.

26. (Previously Presented) The method of claim 25, wherein the symmetric geometrical surface region is an ellipse.

27. (Previously Presented) The method of claim 24, wherein independent typical characteristics are recorded as a data record for the respective geometrical shape.

28. (Previously Presented) The method of claim 23, wherein the computer processing and/or encoding occurs by means of a contour detection algorithm, by means of a gradient steps representation and/or a gradient accentuating representation reduced to bit planes.

29. (Previously Presented) The method of claim 24, wherein at least one characteristic of the thermal spray coating method affecting the quality of the coating layer relates to the spray coating method and/or the spraying device.

30. (Previously Presented) The method of claim 24, wherein the symmetric geometrical surface region is selected from one or more of circles, squares, rectangles, parallelograms and ellipses.

31. (Previously Presented) The method of claim 25, wherein independent typical characteristics are recorded as a data record for the respective geometrical shape.

32. (Previously Presented) The method of claim 26, wherein independent typical characteristics are recorded as a data record for the respective geometrical shape.

33. (Previously Presented) The method of claim 24, wherein the computer processing and/or encoding occurs by means of a contour detection algorithm, by means of a gradient steps representation and/or a gradient accentuating representation reduced to bit planes.

34. (Previously Presented) The method of claim 25, wherein the computer processing and/or encoding occurs by means of a contour detection algorithm, by means of a gradient steps representation and/or a gradient accentuating representation reduced to bit planes.

35. (Previously Presented) The method of claim 26, wherein the computer processing and/or encoding occurs by means of a contour detection

algorithm, by means of a gradient steps representation and/or a gradient accentuating representation reduced to bit planes.

36. (Previously Presented) The method of claim 27, wherein at least one characteristic of the thermal spray coating method affecting the quality of the coating layer relates to the spray coating method and/or the spraying device.

37. (Previously Presented) The method of claim 28, wherein at least one characteristic of the thermal spray coating method affecting the quality of the coating layer relates to the spray coating method and/or the spraying device.

38. (Previously Presented) The method of claim 29, wherein at least one characteristic of the thermal spray coating method affecting the quality of the coating layer relates to the spray coating method and/or the spraying device.